

This study has been financed in part by a grant made by the United States Department of Agriculture under PL-480.

TAXONOMY LABORATORY,  
DEPARTMENT OF BOTANY,  
THE M. S. UNIVERSITY OF BARODA,  
BARODA,  
April 24, 1971.

D. N. THAKER  
S. D. SABNIS

### 30. TWO NEW PLANT RECORDS FOR INDIA FROM KASHMIR

(With two plates)

During a survey of the weeds of Kashmir, I came across the following two species in cultivated fields at Barzulla, Srinagar. The species are not recorded in the existing floristic records in India. Specimens have been deposited at the herbarium of Royal Botanical Gardens, Kew, and at the Blatter Herbarium, Bombay. *Phacelia tanacetifolia* Benth. (Hydrophyllaceae) occurs in the campus of the Regional Research Laboratory, Srinagar, among the experimental pyrethrum plants. It thrives well in its new location. It was perhaps introduced inadvertently with seeds from California, USA. *Sideritis montana* Linn. (Labiatae) occurs on fallow lands at Rawalpura and in some orchards at Barzulla in Srinagar. This species is noted as a weed in Europe and is a recent introduction in Kashmir.

Since the two weeds are not described in any of the Indian floras, their description and diagrams based on specimens collected from Srinagar are given.

***Phacelia tanacetifolia*** Benth. in Trans Linn. Soc. 17: 280, 1837. Munz & Keck in Fl. California, 529-530, 1959.

Annual herb. Stem up to 75 cm, erect, somewhat woody towards the base, branched, slightly greenish purple, grooved, silky pubescent especially towards the apices of the branches. Leaves 9-19.5 cm long, 2-pinnatisect, lobes up to 5 mm long, ovate-lanceolate; alternate, exstipulate, lower petiolate; petiole 1.0-2.5 cm long, pulvinate, slightly silky pubescent; upper sessile, rachis more pubescent. Flowers in long scorpioid, compact cymes, initially looking like small heads, 25-40 in each cyme; ebracteate, subsessile to sessile, peduncle hairy. Sepals 5, 3-7 cm long, linear to obovate, acute, sparsely hairy; hairs white; green, persistent. Petals 5, up to 1 cm long, united at the base but free above the middle, broadly campanulate, lobes ovate, purplish, distinctly veined. Stamens 5, filaments filiform, as long as the styles of the ovary,

glabrous, arising from the base of the corolla tube; anthers globular, dorsifixed, dehiscent early. Ovary on a hairy receptacle, superior, slightly pubescent, pointed towards the apex, 2-celled with 1-2 ovules in each cell. Styles 2, up to 1.3 cm long, hairy up to the middle divergent, saffron-coloured. Seeds usually 2, grayish-brown.

Indigenous in California, U.S.A.

Specimen examined: Kaul 26(1.5.69) Barzulla Lab. campus. (see Plate 1).

*Sideritis montana* Linn. sp. Pl. 575, 1753. Polunin in Fls. Europ. 351(t.6), 1969.

Annual herb. Stem up to 20 cm, erect, branched from the base, angular, woolly all over, jointed, leaves, 1.5-4.0 cm × 3-8 cm, simple, opposite, oblong-lanceolate, sessile, hairy all over, more on the margins; lower leaves blunt and upper mucronate. Flowers bracteate; bracts leafy, longer than the flowers, in verticles on long, lax and leafy spikes, each whorl usually six-flowered. Calyx gamosepalous, cupular with five spiny-tipped lobes, three upper forming the upper lip; tube up to .8 cm, somewhat longer than the lobes, base swollen, distinctly ribbed, hairy. Corolla gamopetalous, bilipped, generally as long as the calyx or slightly exerted, yellowish with brown dots, turning brown on maturity. Corolla tube up to 4 mm. long, hairy outside. Upper lip with three conspicuous lobes, hairy and lower lip with two small lobes, dotted. Stamens 4, included in the corolla tube, didynamous, anthers small, globular. Ovary on a raised, rectangular and glabrous receptacle. Style included in the corolla tube, gynobasic. Capsule with 4-nutlets, each nutlet 2-4 mm diam., tapering towards the apex with a definite median ridge, mottled, slightly brownish.

Distribution: Europe.

Specimen examined: Kaul 11(3.12.68) Barzulla

Kaul 25 (21.4.69) Rawalpora (see Plate 2)

#### ACKNOWLEDGEMENTS

Special thanks are due to the Director, Royal Botanical Gardens, Kew, for confirming the identification of these plants, to Dr. S. N. Sobti for his help during the preliminary identification and to the Director, Regional Research Laboratory, Jammu, for providing facilities. The author is indebted to Prof. P. V. Bole of St. Xavier's College, Bombay, for his criticism and comments.

REGIONAL RESEARCH LABORATORY,  
SANAT NAGAR, SRINAGAR-5,  
INDIA,  
April 19, 1971.

M. K. KAUL